

AMENDMENTS TO THE SPECIFICATION

Please insert the following paragraph on page 1, following the title:

Related Applications

This application is a continuation of international application PCT/EP02/08789 filed August 7, 2002 and claims priority to European application EP 01118812.5 filed August 10, 2001. The content of both prior-filed applications are incorporated herein by reference.

On page 10, please delete paragraph [0043].

Please replace paragraphs [0016], [0026], [0032], [0033] and [0058] with the following:

[0016] The pH dependency of the coating for DYNAL M-270 beads (Dynal Biotech ASA) is shown. There is a pronounced increase in the measured signal in the pH range of pH 9.0 to pH 12.5 when using beads loaded under various pH conditions under otherwise the same test conditions in a TSH test. The results of a TSH assay are given as counts on the Y-axis.

[0026] One partner of such a binding pair which is preferably an antibody or receptor is used for the coating. A receptor for biotin such as avidin and in particular streptavidin is particularly preferred. Particularly suitable materials for the present invention are ~~high-molecular~~ high molecular weight proteins or polymerized proteins such as polymerized streptavidin (SA-poly). It was found that polymerized proteins bind more strongly to surfaces in an adsorptive manner. The reason is probably because polymerized proteins

have a higher number of contact sites. Hence these polymers would still be able to ensure an adequate binding to the surface even when individual contact sites become detached. In the case of monomers having a few to a single contact site the whole monomer is released as soon as the contact site becomes detached.

[0032] In a method according to the invention the microparticle suspension is preferably contacted with the ~~high-molecular~~ high molecular weight protein material at 15-30°C and particularly preferably at room temperature i.p. at ca 18 – 25°C, hence the protein material is not preheated. After loading under strongly alkaline buffer conditions, it is possible to already carry out a first or several separation step(s) which are used to remove weakly adsorbed or non-adsorbed protein.

[0033] The separation can be carried out by conventional methods such as magnetic separation in the case of microparticles containing magnetite. A separation in a microfiltration unit by sieves, filters or membranes is preferred for the method of the present invention. These may be hydrophilic or hydrophobic, however, in the latter case it is preferable to convert them into a hydrophilic state before use which can be achieved in a conventional manner. They preferably have a pore size which lies between the size of the microparticles and the size of the ~~high-molecular~~ high molecular weight protein material. Particularly suitable pore sizes are in the range above about 50% of the size of the protein to be separated, i.e. ca. 50 nm to 2.5 µm. Membranes having pore sizes of 0.4 µm, preferably 0.45 µm to 2.5 µm, preferably up to 2 µm are particularly suitable.

[0058] The CA 15-3 test (Roche Diagnostics GmbH, Order No. 1776169) is a sandwich assay in a two-step test format. In the first step beads, sample, and the biotinylated antibody are incubated, subsequently the beads are magnetically separated, and the supernatant is aspirated. After several washing steps (adding washing buffer, aspirating again, resuspending by vortexing in washing buffer, separating again, aspiration) the beads were resuspended in reagent 2 of the CA 15-3 test from Roche which contains the

ruthenylated antibody. After a further incubation they were washed again, subsequently the beads resuspended in washing buffer were transferred to a measuring cell of an ELECSYS E1010 instrument, and the amount of ruthenium label bound to the analyte was determined.